

Monitoring Data RecordProject Title: R-2417BB (Site 6) COE Action ID: 200201326Stream Name: \_\_\_\_\_ DWQ Numbers: 3378City, County and other Location Information: Lee County, Sanford Bypass (Sta. 540+20 to 555+00 -L- RT.)Date Construction Completed: Water was turned into the stream in Oct. 2006. Streambank reforestation was completed in Jan. 2007.Monitoring Quarter: ( 2 ) of 8Ecoregion: \_\_\_\_\_ 8 digit HUC unit: 03030004

USGS Quad Name and Coordinates: \_\_\_\_\_

**Rosgen Classification:** \_\_\_\_\_Length of Project: 1,734' Urban or Rural: Rural Watershed Size: \_\_\_\_\_Monitoring DATA collected by: M. Green and J. Young Date: 8/7/07

## Applicant Information:

Name: NCDOT Roadside Environmental UnitAddress: 1425 Rock Quarry Rd. Raleigh, NC 27610Telephone Number: (919) 861-3772 Email address: mlgreen@dot.state.nc.us

## Consultant Information:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone Number: \_\_\_\_\_ Email address: \_\_\_\_\_

**Project Status:** Complete**Monitoring Level required by COE and DWQ (404 permit/ 401 Cert.):** Level (1) 2 3Monitoring Level 1 requires completion of *Section 1, Section 2 and Section 3*

**Permit States:** The permittee will visually monitor the vegetative plantings on all mitigation streambanks to access and insure complete stabilization of the mitigation stream segments. This monitoring will include adequate visual monitoring of planted vegetation quarterly for a minimum of two years after final planting, and appropriate remedial actions (e.g., replanting, streambank grading, ect.). If within any monitoring year, bank stabilization is not acceptable as determined by the Corps of Engineers, and remedial action required by the Corps of Engineers is performed, the two year monitoring of the affected portions of the stream will begin again.

Section 1. PHOTO REFERENCE SITES**Total number of reference photo locations at this site:** 9 photo point locations – 2 photos taken from each location**Dates reference photos have been taken at this site:** 5/21/07, 8/7/07**Individual from whom additional photos can be obtained (name, address, phone):** \_\_\_\_\_

Other Information relative to site photo reference: \_\_\_\_\_

If required to complete Level 3 monitoring only stop here; otherwise,

**Section 2. PLANT SURVIVAL**

**Attach plan sheet indicating reference photos.**

Identify specific problem areas (missing, stressed, damaged or dead plantings):

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Estimated causes, and proposed/required remedial action:

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ADDITIONAL COMMENTS: Planted live stakes and bareroot seedlings noted on the streambank and in the floodplain consisted of black willow, silky dogwood, river birch, black cherry, water oak, and willow oak. Other herbaceous and woody species noted were *Juncus* sp., sedge, woolgrass, fennel, pine, pokeweed, *Scirpus* sp., clover, ragweed, alder, sweetgum, tulip poplar, sycamore, red maple, and cattail.

If required to complete Level 1 and Level 2 monitoring only stop here; otherwise, complete section 3.

### Section 3. CHANNEL STABILITY

**Visual Inspection:** The entire stream project as well as each in-stream structure and bank stabilization/revetment structure must be evaluated and problems addressed.

Report on the visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. Include a discussion of any deviations from as-built and an evaluation of the significance of these deviations and whether they are indicative of a stabilizing or destabilizing situation.

This is the 2nd quarterly monitoring evaluation for this stream relocation. The stream is stabilized except for a few cross vanes that have water piping through these structures. NCDOT will continue to monitor this stream relocation.

8/7/07	PP #6 Upstream Sta. 546 +75	PP #7 Downstream Sta. 545+60	Station Number	Station Number	Station Number
Structure Type	Crossvane	Crossvane			
Is water piping through or around structure?	Water is piping through the crossvane	Water is piping through the crossvane			
Head cut or down cut present?	Slight headcut				
Bank or scour erosion present?					
Other problems noted?					

**NOTE:** Attach separate narrative sheets to each monitoring report describing/discussing the overall monitoring results. Include the identification of specific problem areas/channel failures, estimated cause and proposed/required remedial action. This should include a brief discussion of any parameter that has changed significantly from as-built.



# Site 6



Photo Point #1 (Upstream)



Photo Point #1 (Downstream)



Photo Point #2 (Upstream)



Photo Point #2 (Downstream)



Photo Point #3 (Upstream)



Photo Point #3 (Downstream)

2nd Quarter – August 2007



# Site 6



Photo Point #4 (Upstream)



Photo Point #4 (Downstream)



Photo Point #5 (Upstream)



Photo Point #5 (Downstream)



Photo Point #6 (Upstream)



Photo Point #6 (Downstream)



# Site 6



Photo Point #7 (Upstream)



Photo Point #7 (Downstream)



Photo Point #8 (Upstream)



Photo Point #8 (Downstream)



Photo Point #9 (Upstream)



Photo Point #9 (Downstream)